

UNITED STATES DEPARTMENT OF COMMERCE **United States Patent and Trademark Office**

COMMISSIONER OF PATENTS AND TRADEMARKS Address:

Washington, D.C. 20231

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 19789-008 09/356,926 07/19/99 OOIJ

IM52/0521

DINSMORE & SHOHL LLP 1900 CHEMED CENTER 255 EAST FIFTH STREET CINCINNATI OH 45202

EXAMINER LAVILLA, M

PAPER NUMBER ART UNIT 1775

DATE MAILED:

05/21/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/356,926

Applicant(s)

Van Ooij et al.

Examiner

LaVilla

Art Unit **1775**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 1) Responsive to communication(s) filed on Apr 13, 2001 2b) \(\nabla \) This action is non-final. 2a) This action is **FINAL**. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims is/are pending in the application. 4) X Claim(s) 1-38 4a) Of the above, claim(s) 18-38 is/are withdrawn from consideration. 5) Claim(s) ______ is/are allowed. 6) 💢 Claim(s) 1-17 is/are rejected. is/are objected to. 7) Claim(s) are subject to restriction and/or election requirement. 8) Claims **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are objected to by the Examiner. 11) The proposed drawing correction filed on ______ is: a) approved b) disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) All b) Some* c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 18) X Interview Summary (PTO-413) Paper No(s). _ 4,5 15) X Notice of References Cited (PTO-892) 19] Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 20) Other: 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).

Art Unit: 1775

DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Claims 1-17 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that rejoinder of Claim 38 would be appropriate upon allowance of Claim 1. This is not found persuasive because Claim 1 is not indicated as being allowed.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poutasse et al. USP 5,622,782. Poutasse et al. teaches applying a mixture of silanes to a metal substrate in order to facilitate subsequent application of a paint layer (see Abstract; col. 5, lines 25-33; column 6, line 20 through col. 7, line 52; col. 8, lines 18-51; Examples; and Claim 1 in Poutasse). Poutasse does not exemplify applicant's composition, but teaches using a two component aqueous mixture. It would be expected that aqueous mixtures of the silanes of Poutasse would inherently contain some partially hydrolyzed groups. Poutasse highlights bis silyl aminosilanes

٠.٠

Application/Control Number: 09/356,926

Art Unit: 1775

and vinyl silanes as respective ingredients for the two classes of compounds as being effective treating compositions. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a mixture of bis silyl aminosilane and vinyl silane as disclosed by Poutasse as effective in order to treat a metal substrate. It would have been obvious to one of ordinary skill in the art at the time of the invention to coat a zinc containing substrate surface as Poutasse teaches that the coatings of Poutasse effectively treat zinc containing substrate surfaces. Poutasse teaches that a range of relative amounts of the two classes of silanes are effective (from 95/5 to 5/95). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the claimed relative amounts as Poutasse teaches that these amounts form effective coatings.

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. USP 6,071,566. Brown et al. teaches applying a mixture of silanes to a metal substrate in order to facilitate subsequent application of a paint layer (see Abstract; col. 3, line 59 through col. 6, line 2; col. 7, line 65 through col. 8, line 7; and Claims in Brown et al.). Brown does not exemplify applicant's composition, but teaches using a two component aqueous mixture. It would be expected that aqueous mixtures of the silanes of Brown would inherently contain some partially hydrolyzed groups. Brown highlights bis (trimethoxysilylpropyl) amine and vinyl silanes as respective ingredients for the two classes of compounds as being effective treating compositions. It would have been obvious to one of ordinary skill in the art at the time of the

Application/Control Number: 09/356,926

Art Unit: 1775

Brown as effective in order to treat a metal substrate. It would have been obvious to one of ordinary skill in the art at the time of the invention to coat a zinc containing substrate surface, including a galvannealed steel surface, as Brown teaches that the coatings of Brown effectively treat zinc containing substrate surfaces. Brown teaches that a range of relative amounts of the two classes of silanes are effective (from 99/1 to 1/99). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the claimed relative amounts as Brown teaches that these amounts form effective coatings.

5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop USP 5,393,353. Brown et al. teaches applying a mixture of silanes to a metal substrate in order to facilitate subsequent application of a paint layer (see Abstract; col. 3, line 45 through col. 5, line 23; col. 6, line 39 through col. 8, line 44 in Bishop). Bishop does not exemplify applicant's composition, but teaches using a multicomponent aqueous mixture. It would be expected that aqueous mixtures of the silanes of Bishop would inherently contain some partially hydrolyzed groups. Bishop highlights bis silyl aminosilanes and vinyl silanes as respective ingredients for the compounds as being effective treating compositions. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a mixture of bis silyl aminosilanes and vinyl silanes as disclosed by Bishop as effective in order to treat a metal substrate. It would have been obvious to one of ordinary skill in the art at the time of the invention to coat a zinc

Art Unit: 1775

containing substrate surface, including a galvannealed steel surface, as Bishop teaches that the coatings of Bishop effectively treat zinc containing substrate surfaces. Brown teaches that the amount of aminosilane would be from 0.5 to 2% relative to the vinyl silane. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize 0.5 to 2% as disclosed by Bishop as Bishop teaches that these amounts form effective coatings; using this amount achieves applicant's claimed relative proportion.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael LaVilla whose telephone number is (703) 308-4428. Facsimile communications may be sent to (703) 305-5408.

Michael LaVilla

May 17, 2001

May 17, 2001